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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/022,893 | 12/20/2001 | Michael Joachim Wolf | Q67427 | 2068 |

7590 12/08/2005

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| EXAMINER |
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NGUYEN, STEVEN H D

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| ART UNIT | PAPER NUMBER |
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2665

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/022,893 | Applicant(s) WOLF ET AL. | |
| | Examiner Steven HD Nguyen | Art Unit 2665 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 9-11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Iino (USP 5335223).

Regarding claims 1, 11 and 14, Iino discloses a network device (Fig 5), in particular for a telecommunications network with synchronous digital hierarchy, for delay compensation of data packets, which delay occurs during passage of the data packets through an input stage (Fig 5, Ref Pointer Inserter) and an output stage (Fig 5, Ref Frame former) of the network device, the output stage being connected to the input stage via a first transfer path and via a second transfer path (Fig 5, Ref 4) delay occurring on the first transfer path and a second delay occurring on the second transfer path, wherein the data packets are transferred in multiplex frames (SONET or SDH frames), each containing at least one data packet to be transferred, as well as at least one phase reference identifier (Figs 2-3, the pointers) for determining the respective position of the data packet within the corresponding frame, wherein the network device comprising phase correcting means (Fig 5, Ref 10 and 33) for adjusting the phase reference identifier allocated to a respective data packet by a predetermined phase correcting value, leading in the phase, which corresponds to a maximum expected delay for a transfer of the data packets on the first transfer path or the second transfer path (Col. 5, lines 5-35, col. 6, lines 40-47, col. 7, lines 14-42 and col.

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8, lines 49 to col. 9, lines 40, the pointers are adjusted based on the phase different between the input stage and output stage in order to compensate at the input side), and buffer means for buffering the data packets by buffering times such that for each respective data packet its buffering time and its delay actually needed for passing through the network device in total correspond to the maximum expected delay taken into account in its allocated, adjusted phase reference identifier (Fig 9, Ref 61 is buffer which inherently accounts the time for the signals needs to pass the network device, See col. 2, lines 5-12).

Regarding claim 2, Iino inherently discloses the buffer means determine the delay of the data packets actually needed for passing through via the first transfer path or the second transfer path and adjust the respective buffering time to the actually needed delay (Fig 9, the signal is read out from buffer when the new pointers is outputted based on the different phase, so it inherently determines the time it need to store the signal).

Regarding claim 3, Iino inherently discloses the maximum expected delay is substantially determined by means of maximum lengths of connecting leads used for the first transfer path and/or the second transfer path (Fig 5, the maximum expected delay must be equal to the different phase in order to allow the signal pass from input stage to output stage).

Regarding claim 8, Iino discloses the phase correcting means are allocated entirely or partially to the input stage or to the output stage (Fig 5, Ref 33 and 10 and Fig 4 is allocated between input and output).

Regarding claim 9, Iino discloses the buffer means comprise buffers arranged on the input side of the output stage or on the input side of the first transfer path or on the second transfer path (Fig 9, Ref 61 is at input stage).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-7, 10 and 12-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Iino (USP 5335223).

Regarding claims 4-6, Iino fails to disclose constructed as a redundant network device wherein the first transfer path is guided via a first device and the second transfer path via a second device, redundant to the first device wherein the first device and the second device comprising a first or a second switching matrix, respectively; each switch matrix comprising a first and a second matrix module. However, the examiner takes an office notice that a method and system for constructing a multi stage switch which comprises the working and protecting path, working and protecting switch and each switch comprises two modules are well known and expected in the art at the time of invention was made to implement this multistage switch into the system of Iino. construct a network of substantially unlimitedly large capacity.

Regarding claim 7, Iino fails to disclose the input stage and the corresponding output stage are combined into a joint module and/or the input stage and the output stage are constructed as matrix stages of a multi-stage switching matrix. However, the examiner takes an office notice that a method and system for using the switches to form a multistage cross connect is well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement a multistage switches as cross

connect switch into the system of Iino. The motivation would have been to construct a network of substantially unlimitedly large capacity.

Regarding claim 10, Iino discloses the multiplex frames are SONET frames and the phase reference identifiers are contained in the control information of the multiplex frames and the data packets are virtual containers or are transferred in virtual containers (Fig 3 which includes transport overhead and data region). However, Iino discusses the SDH is substantially identical to the SONET. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement SDH signal as disclosed by Iino into the system of Iino.

Regarding claims 12-13, Iino discloses a software function at the prior art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to construct a software for storing on CD etc which performs the function such determining the phase different between input and output and using it to compensate for the time that signal must travel via the link between the input and output. The motivation would have been to reduce cost.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Baydar (USP 5717693) discloses a method and system for processing point for payload of SONET.

Chopping (USP 5172376) discloses a method and system for SDH rejustification.

Yoshida (USP 6339628) discloses a method and system for changing pointer based on the phase different between input and output clock.

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Parruck (USP 5142529) discloses a method and system for calculating pointer.

Upp (USP 4998242) discloses a method and system for transferring the sonnet signal across the switches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
December 5, 2005